



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.                  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------------|-------------|----------------------|---------------------|------------------|
| 09/820,029                       | 03/28/2001  | Jeffrey Wissing      | NC17377             | 3683             |
| 32294                            | 7590        | 10/31/2006           | EXAMINER            |                  |
| SQUIRE, SANDERS & DEMPSEY L.L.P. |             |                      | MOORE, IAN N        |                  |
| 14TH FLOOR                       |             |                      | ART UNIT            |                  |
| 8000 TOWERS CRESCENT             |             |                      | PAPER NUMBER        |                  |
| TYSONS CORNER, VA 22182          |             |                      | 2616                |                  |

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

57

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/820,029 | <b>Applicant(s)</b><br>WISSING ET AL. |  |
|                              | <b>Examiner</b><br>Ian N. Moore      | <b>Art Unit</b><br>2616               |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7, 8, 14 and 15 is/are allowed.
- 6) ☒ Claim(s) 9-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Objections*

1. Claim 9 is objected to because of the following informalities:

**Claim 9** recites, “a DSL modem” in line 2 and 4. It is unclear whether “a DSL modem” in line 4 is the same as “a DSL modem” recited in line 2.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 9-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Bridger (US006272209B).

**Regarding Claim 9**, Bridger discloses a method for providing a customer premise line connection (see FIG. 3, CPE 350 with subscriber line) to a DSL modem (see FIG. 3, DMT modem 305 for ADSL at LTE 300, or ADSL modem 360 at CPE 350) comprising the steps of:

detecting whether the line has a off-hook condition or an on-hook condition (see col. 3, line 55-61; see col. 6, line 50-57; detecting whether the CPE/LTE is “off the hook” (i.e. in lifeline mode, or loss of VoDSL connection) or “on the hook” (i.e. in normal mode, or transmission VoDSL)) and

Art Unit: 2616

energizing a relay (see FIG. 3, connecting/energizing a relay/switch between subscriber loop port 301 and A-SLIC 303 at LTE 300, or relay 351 and 352 at CPE 350) to couple the customer premise line to a DSL modem (see FIG. 3, connecting CPE's subscriber line to DMT modem 305 for ADSL at LTE 300, or ADSL modem 360 at CPE 350); see col. 3, line 63 to col. 4, line 65; wherein the line has said on-hook condition (see FIG. 3, relay/switches couples the CPE line to DSL modem 305/360 in normal mode (i.e. on-hook condition)),

activating switching means for (see FIG. 3, a relay/switch between subscriber loop port 301 and A-SLIC 303 at LTE 300, or relay 351 and 352 at CPE 350) bypassing the DSL modem during a quiescent state (see FIG. 3, bypassing DSL modem 305 by switching a line to POTS-SLIC 302 when a DSL modem 305 is unavailable/suspended/power-down at LTE 300, or bypassing DSL modem 360 by switching a line to a direct path 355 when a DSL modem 360 is unavailable/suspended/power-down at CPE 350; see col. 5, line 50 to col. 6, line 67), in response to the DSL modem receiving a suppression signal (see col. 6, line 45-67; when a loss of power signal is received at the LTE VoDSL modem).

**Regarding Claim 10**, Bridger discloses the step of sensing current drain (see FIG. 3); see col. 6, line 54-59; detecting loss/drain of power signal/current).

**Regarding Claim 11**, Bridger discloses the step of booting up a processor (see FIG. 3, Microprocessor 363 and CODEC 362 at CPE 350, DSP 306, FPGA 309, and Microprocessor 308 at LTE 300 must be turn on (i.e. booting) to perform processing; see col. 5, line 50 to col. 6, line 69).

**Regarding Claim 12**, Bridger discloses connecting the line to at least one subscriber line interface circuit (SLIC) (see FIG. 3, a relay/switches connect the subscriber line to POTS-SLIC

Art Unit: 2616

302 at LTE 300, or Subscriber local loop port/interface 353 at CPE 350 in the lifeline mode; see col. 4, line 4-46; col. 5, line 44 to col. 6, line 69).

**Regarding Claim 13**, Bridger discloses connecting the DSL modem to a subscriber line (see FIG. 3, a relay/switches connect the subscriber line to DSL modem 305 at LTE 300, or DSL modem 360 at CPE 350 in the normal mode; see col. 4, line 45 to col. 5, line 48).

4. Claims 9-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Van Wonterghem (US 2001/0004382).

**Regarding Claim 9**, Van Wonterghem discloses a method for providing a customer premise line connection (see FIG., ADSL\_NT for user line/connection) to a DSL modem (see FIG., LT ADSL modem, or ADSL\_NT modem) comprising the steps of:

detecting whether the line has a off-hook condition or an on-hook condition (see page 2, paragraph 14-17; detecting whether the ADSL\_NT/ADSL\_LT is “off the hook” (i.e. in life-line mode, or voltage dropping) or “on the hook” (i.e. in normal mode)) and

energizing a relay (see FIG., relay/switch S1-S3) to couple the customer premise line to a DSL modem (see FIG., connecting user line/connection to LT ADSL modem or NT ADSL modem), wherein the line has said on-hook condition (see FIG. , S1-S3 couples the user line to ADSL modem in normal mode (i.e. on-hook condition)); see page 1-2,, paragraph 9-12,

activating switching means for (see FIG. , a relay/switch S1-S3) bypassing the DSL modem during a quiescent state (see FIG. , bypassing LT/NT ADSL modem by switching a user line to LT/NT POTS TERMINATION when LT/NT ADSL modem is unavailable/suspended/power-down; see page 2, paragraph 10-16), in response to the DSL

Art Unit: 2616

modem receiving a suppression signal (see page 2, paragraph 14; when LT ADSL modem senses a voltage drop signal).

**Regarding Claim 10**, Van Wonterghem discloses the step of sensing current drain (see page 2, paragraph 14; detecting voltage drop on line).

**Regarding Claim 11**, Van Wonterghem discloses the step of booting up a processor (see FIG., LT/NT ADSL Modem must have a processor and that must be turn on (i.e. booting) to perform processing).

**Regarding Claim 12**, Van Wonterghem discloses connecting the line to at least one subscriber line interface circuit (SLIC) (see FIG. a relay/switches S1-S3 connect the user line to LT/NT POTS termination in the lifeline mode; see page 1-2, paragraph 10-14).

**Regarding Claim 13**, Van Wonterghem discloses connecting the DSL modem to a subscriber line (see FIG. 3, a relay/switches S1-S3 connect the user line to LT/NT ADSL modem 305 in the normal mode; see page 1-2, paragraph 9-12).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 9-13 rejected under 35 U.S.C. 103(a) as being unpatentable over Tate (US006400803B1).

Art Unit: 2616

**Regarding Claim 9**, Tate discloses a method for providing a customer premise line connection (see FIG. 2, local ports) to a DSL modem (see FIG. 2, DSL modem at Access Mux 13, or CPE 12) comprising the steps of:

detecting whether the line has a off-hook condition or an on-hook condition (see FIG. 2; see FIG. 2, lifeline detect in CPE 12 or Access Mux 13, see FIG. 5; see col. 4, line 8-24; 50-67; see col. 5, line 16-46; detecting whether the circuit is “off the hook” (i.e. when the circuit is enable/activated for lifeline mode) or “on the hook” (i.e. when the circuit is idle/normal in normal mode))) and

energizing a relay (see FIG. 3, relay within switches 331-334 and 301 of CPE, or see FIG. 2, combined function of Mux 13) to couple the customer premise line to a DSL modem, wherein the line has said on-hook condition (see FIG. 3, DSL modem 310; see col. 4, line 9-24; 37-59; when there circuit is not activated, relay switches the subscriber line 340 to a DSL modem 310; also see FIG. 2, DSL modems access Mux 13 at Mux 13 relaying the local signal to DSL modem),

activating switching means for bypassing the DSL modem during a quiescent state (see FIG. 3, Lifeline router 320 sending a signal/indication to bypass a DSL modem 310 in a lifeline mode when a DSL modem 310 is unavailable/suspended/down; see col. 4, line 36-45, 50 to col. 5, line 27; also see FIG. 2, combine function bypassing DSL modem, by connection lifeline POTS when DSL modem is unavailable/suspended/down).

Tate teaches signaling information to entry or exit from “lifeline” mode is controlled by local exchange (LE) to the Mux, and CPE equipment will then behave in the same function; see col. 3, line 40-65, and LTE (i.e. mux) send a signal (i.e. suppression signal) to the CPE to

Art Unit: 2616

activate lifeline service; and a signaling information with regards to lifeline mode (i.e. suppression signal) is also received at the DSL modem; see col. 3, line 65 to col. 4, line 23.

Tate does not explicitly disclose the DSL modem receiving a suppression signal. Bridger teaches DSL modem receiving a suppression signal (see col. 6, line 45-67; when a loss of power signal is received at the LTE VoDSL modem). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the DSL modem receiving a signal (i.e. suppression), as taught by Bridger in the system of Tate; and to extends signaling information of Tate to from LE, via Mux, to the DSL modem 310 to trigger a lifeline mode, so that it would improved a voice lifeline services; see Bridger col. 1, line 55-56.

**Regarding Claim 10**, Tate discloses wherein the step of detecting said off-hook condition comprises the step of sensing current drain (see FIG. 2-3, the current drain/off-hook is detected when the circuit is enable/activated for lifeline mode); see col. 4, line 8-24; 50-67; see col. 5, line 16-46; also see FIG. 5). Bridger discloses the step of sensing current drain (see FIG. 3); see col. 6, line 54-59; detecting loss/drain of power signal/current).

**Regarding Claim 11**, Tate discloses the step of booting up a processor (see FIG. 2, CPE 12, or see FIG. 3, CPE 300 has a processor and that must be turn on (i.e. booting) to perform processing; see col. 3, line 35-65; see col. 4, line 45-65). Bridger discloses the step of booting up a processor (see FIG.3, Microprocessor 363 and CODEC 362 at CPE 350, DSP 306, FPGA 309, and Micorprossor 308 at LTE 300 must be turn on (i.e. booting) to perform processing; see col. 5, line 50 to col. 6, line 69).

**Regarding Claim 12**, Tate discloses connecting the line to at least one subscriber line interface circuit (SLIC) (see FIG. 3, relay 331-334 and 301 connects the line to an interface circuit of the switch 331-334 and 301 for each subscriber in the lifeline mode; see col. 4, line 36-

Art Unit: 2616

45, 50 to col. 5, line 27). Bridger discloses connecting the line to at least one subscriber line interface circuit (SLIC) (see FIG. 3, a relay/switches connect the subscriber line to POTS-SLIC 302 at LTE 300, or Subscriber local loop port/interface 353 at CPE 350 in the lifeline mode; see col. 4, line 4-46; col. 5, line 44 to col. 6, line 69).

**Regarding Claim 13**, Tate discloses connecting the DSL modem to a subscriber line (see FIG. 3, relay 331-334 and 301 connects the line to DSL modem 310 for each subscriber in the normal mode; see FIG. 3, DSL modem 310; see col. 4, line 9-24; 37-59). Bridger discloses connecting the DSL modem to a subscriber line (see FIG. 3, a relay/switches connect the subscriber line to DSL modem 305 at LTE 300, or DSL modem 360 at CPE 350 in the normal mode; see col. 4, line 45 to col. 5, line 48).

#### ***Response to Arguments***

7. Applicant's arguments, see pages 7-10 filed 8-9-2006, with respect to claims **7,8, 14 and 15** have been fully considered and are persuasive. The rejection of claims 7 and 8 has been withdrawn.

8. Applicant's arguments with respect to **claims 9-13** have been considered but are moot in view of the new ground(s) of rejection.

#### ***Allowable Subject Matter***

9. **Claims 7,8,14 and 15** are allowed.

Art Unit: 2616

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N. Moore whose telephone number is 571-272-3085. The examiner can normally be reached on 9:00 AM- 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



INM  
10-21-06



DORIS H. TO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600